

MCCRACKEN COUNTY

(McCracken County Water Service Area Map)

- Estimated 1999 population of 64,200--92% on public water
- Estimated 2020 population of 63,800--95% on public water
- 480 miles of water lines, with plans for 140 additional miles
- Estimated funding needs for public water 2000-2005--\$1,888,000
- Estimated funding needs for public water 2006-2020--\$2,571,000

McCracken County had an estimated population of 64,200 (27,679 households) in 1999 with a projected population of 63,802 (28,890 households) in 2020. Over 90 percent of the county is served by public water, the remainder relying primarily on private domestic wells. About 920 new households will be placed on public water through line extensions in 2000-2020.

Estimated Costs - Proposed Projects, 2000-2005

COUNTY/System		New Customers		Rehab	Source	Treatment	Tanks/ Pumps	Total
	Miles	Number	Cost in \$1000	in \$1000	in \$1000	in \$1000	in \$1000	in \$1000
MCCRACKEN								
REIDLAND W/D				32				32
HENDRON W/D	8.5	125	222					222
WEST MCCRACKEN W/D	30.2	408	784				850	1,634
TOTAL	38.7	533	1,006	32			850	1,888

Estimated Costs - Proposed Projects, 2006-2020

COUNTY/System		New Customers		Rehab	Source	Treatment	Tanks/ Pumps	Total
	Miles	Number	Cost in \$1000	in \$1000	in \$1000	in \$1000	in \$1000	in \$1000
MCCRACKEN								
REIDLAND W/D	4.5	67	117					117
WEST MCCRACKEN W/D	94.4	317	2,454					2,454
TOTAL	98.9	384	2,571					2,571

PUBLIC WATER SYSTEMS

McCracken County is served by four community water systems--3 water districts, 1 municipal--and 1 non-community water system.

HENDRON WATER DISTRICT

PWSID: 0730190
 System Type:..... COMMUNITY
 Owner Type:..... WATER DISTRICT
 Surface Source:

WATER SERVICE AREAS MCCRACKEN COUNTY Kentucky



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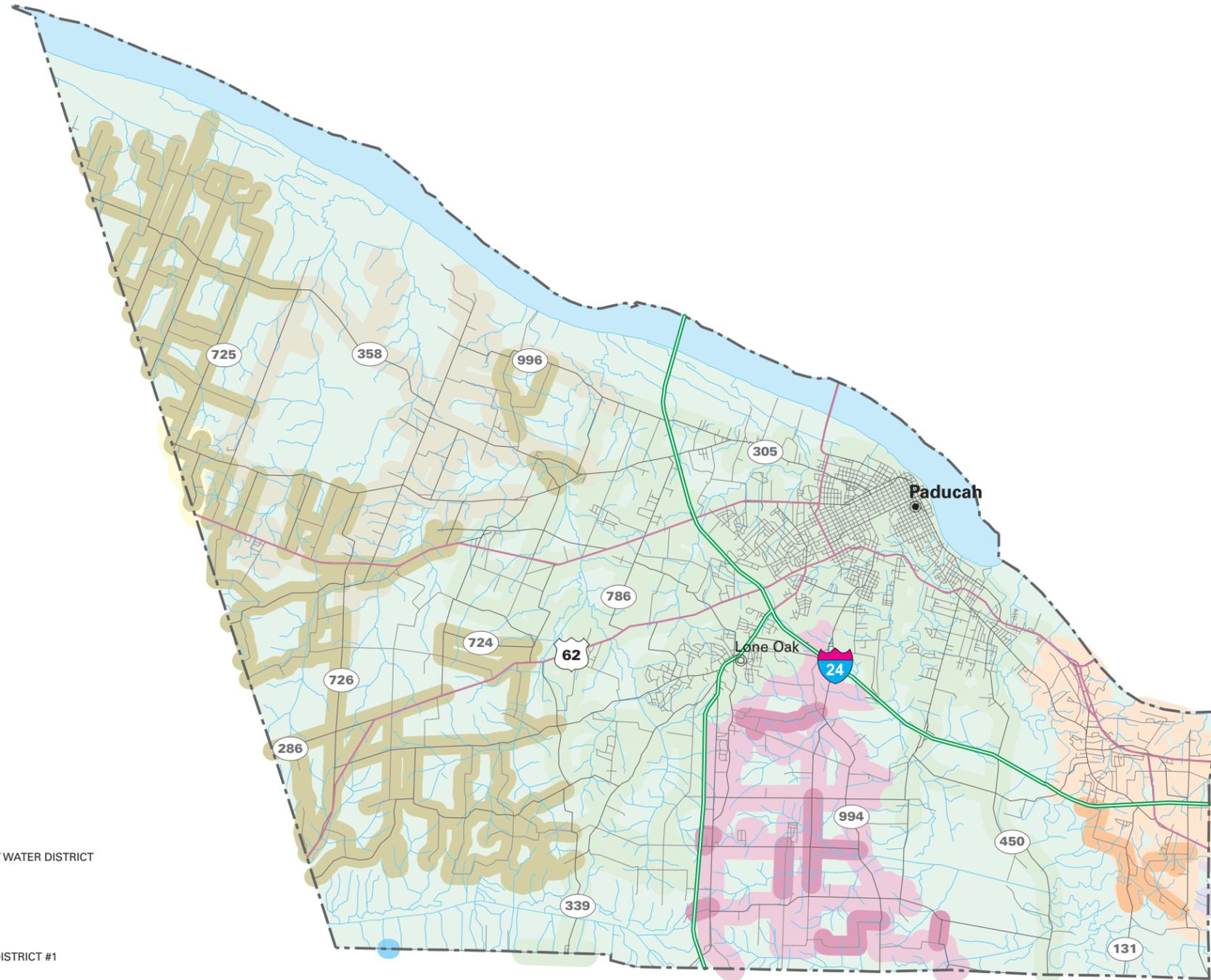
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WATER SERVICE STATUS BY OWNER

EXISTING SERVICE AREA	PROPOSED SERVICE AREA	OWNER
		WEST MCCRACKEN COUNTY WATER DISTRICT
		REIDLAND WATER DISTRICT
		PADUCAH WATER WORKS
		NORTH MARSHALL WATER DISTRICT #1
		KEVIL WATER DEPARTMENT
		HICKORY WATER DISTRICT
		HENDRON WATER DISTRICT

Purchase Source:PADUCAH WATER WORKS
 Well Source:
 Sells Water to:
 Treatment Plant Capacity (MGD):..... 0.00
 Percent Daily Average Production: 0.00
 Total Tank Storage Capacity (gallons):..... 550,000.00
 Total Service Connections: 2,209.00
 Number of Employees:..... 7.00
 Treatment Operator Class:2D
 Distribution Operator Class:
 Customer Rate for 1,000 Gallons:..... 3.56
 O/M costs 1997:..... 485,811.00
 O/M costs per Service Connection: 210.31
 Net Revenue 1997: 14,567.00
 Total Water Produced 1997 (gallons):..... 0.00
 Water Sold 1997 (gallons):..... 154,137,000.00
 Unaccounted-for Water 1997 (%): 6.15

The district serves 2,209 customers and employs 7 fulltime employees. The district currently purchases an average of 660,000 gallons per day from the Paducah Water Works. The district has 4 towers that have and combined storage capacity of 550,000. The district currently spends 80% of revenue on operation and maintenance.

REIDLAND WATER DISTRICT

PWSID: 0730368
 System Type:..... COMMUNITY
 Owner Type: WATER DISTRICT
 Surface Source:
 Purchase Source:
 Well Source: Yes
 Sells Water to:
 Treatment Plant Capacity (MGD):..... 2.00
 Percent Daily Average Production: 42.00
 Total Tank Storage Capacity (gallons):..... 115,000.00
 Total Service Connections: 2,603.00
 Number of Employees:..... 0.00
 Treatment Operator Class:2D
 Distribution Operator Class:3A
 Customer Rate for 1,000 Gallons:..... 1.95
 O/M costs 1997:..... 254,443.00
 O/M costs per Service Connection: 87.98
 Net Revenue 1997: 77,935.00
 Total Water Produced 1997 (gallons):..... 279,468,700.00
 Water Sold 1997 (gallons):..... 231,054,841.00
 Unaccounted-for Water 1997 (%): 5.78

The district currently has 2,603 customers. The district has five wells from which it withdraws 786,000 gallons per day. The treatment plant is rated for 2,000,000. The district

has a combined storage capacity of 615,000 gallons. The district spends 81% of revenue on operation and maintenance.

PADUCAH WATER WORKS

PWSID: 0730533
System Type:..... COMMUNITY
Owner Type:..... MUNICIPAL
Surface Source:..... OH\TN RIVERS
Purchase Source:
Well Source:
Sells Water to:.....HENDRON WATER DISTRICT
Treatment Plant Capacity (MGD):..... 12.00
Percent Daily Average Production: 58.00
Total Tank Storage Capacity (gallons):..... 5,000,000.00
Total Service Connections: 18,722.00
Number of Employees:..... 50.00
Treatment Operator Class:.....3D
Distribution Operator Class:4A
Customer Rate for 1,000 Gallons:..... Not available
O/M costs 1997:..... Not available
O/M costs per Service Connection: Not available
Net Revenue 1997: Not available
Total Water Produced 1997 (gallons):..... Not available
Water Sold 1997 (gallons):..... Not available
Unaccounted-for Water 1997 (%): Not available

The Paducah Water Works currently has 18,722 customers and employs 50 fulltime employees. PWW withdraws its water from the Ohio River and has an average daily withdrawal of 6.5-7.0 million gallons. PWW's treatment plant has a capacity of 12 million gallons per day. PWW currently has a total storage capacity of 7,575,000 gallons. PWW currently sells water to the West McCracken County Water District and Hendron Water District. PWW currently spends 63% of revenue on operation and maintenance.

WEST MCCRACKEN COUNTY WATER DISTRICT

PWSID: 0730454
System Type:..... COMMUNITY
Owner Type:..... WATER DISTRICT
Surface Source:
Purchase Source:PADUCAH WATER WORKS
Well Source:
Sells Water to:
Treatment Plant Capacity (MGD):..... 0.00
Percent Daily Average Production: 0.00
Total Tank Storage Capacity (gallons):..... 250,000.00
Total Service Connections: 1,115.00
Number of Employees:..... 3.00

Treatment Operator Class:.....	2D
Distribution Operator Class:	
Customer Rate for 1,000 Gallons:.....	4.73
O/M costs 1997:.....	320,911.00
O/M costs per Service Connection:.....	292.54
Net Revenue 1997:.....	18,670.00
Total Water Produced 1997 (gallons):.....	0.00
Water Sold 1997 (gallons):.....	115,872,000.00
Unaccounted-for Water 1997 (%):.....	7.69

The district currently serves 1,115 customers and has 3 fulltime employees. The district currently purchases about 400,000 gallons a day from Paducah Water Works. The district has a total storage capacity of 750,000 gallons from two tanks. The district uses 75% of revenue for operation and maintenance

OTHER SYSTEMS

US ENRICHMENT CORP

US Enrichment Corp. is located in McCracken County. The system serves a population of 2,000 and has 2 service connections. The private, non-transient, non-community system has treatment capacity of 5,500,000 gallons per day. The water source is the Ohio River.

PRIVATE DOMESTIC SYSTEMS

About 6,400 people in McCracken County rely on private domestic wells for their source of water.

GroundWater Resource in McCracken County are abundant with fair to good water quality. All areas of the county have the ability to produce water from drilled wells at reasonable depths in quantities sufficient for domestic use. Multiple zones of production are common throughout the county. Depths to upper most production is between 30 and 200 feet.

Generally, depths to ground-water is under 100 feet except in the uplands of south-western McCracken County where sufficient ground-water is obtained at depths greater than 100 feet.

Water quality generally is good except in areas where downward percolation of surface water and fluids from domestic sewage-disposal systems, and other sources of domestic or industrial pollution have contaminated the aquifer. Ground water sometimes contains iron naturally in objectionable amounts from the deeper zones. In some formations with slightly acidic

ground-water, a chemical reaction between the acidic ground-water and steel well casing and pump equipment will produce a high iron content in the water which is not naturally occurring.
